

REMARKS

Claims 1-68 are pending. Claims 4-9, 21-26, 38-43, and 55-60 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-68 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Whitfield (U.S. Patent No. 6,693,921) in view of Hardy (U.S. Patent No. 6,370,120). Claims 1-68 remain in the case for reconsideration. Reconsideration is requested. No new subject matter has been added.

Claim Rejections – 35 U.S.C. § 112

Applicant has amended the claims to obviate the Examiner's rejections under §112.

Claim Rejections – 35 U.S.C. § 103(a)

Claim 1 recites a decoding means for decoding packets, which includes a processor that is adapted to determine an intended sequence of the voice data from the received packets, arrange the received packets in the sequence, infer lost packets in places of the sequence not having a corresponding received packet and determine a burstiness statistic for quantifying how the lost packets are non-uniformly distributed with respect to the received packets within the sequence. Claims 18 and 35 recite similar limitations. This is described in the specification on pages 8 and 9 and in figure 4.

The Examiner alleges that Whitfield discloses a receiving system 100 that determines the sequence of received packets, arranges the received packets into the proper sequence and infers lost packets in the sequence where there are no received packets. Whitfield, column 4, lines 40-67 and column 5, lines 1-17. The Examiner further alleges that Hardy discloses a burstiness statistic from the determination of an average packet loss rate.

The combination of Hardy and Whitfield does not determine a burstiness statistic as specified in the claims. The burstiness statistic as specified in the claims solves the problems associated with using the average packet loss rate described in Hardy. See, Background of the Invention, page 2, lines 17-23; Figure 1. The average packet loss rate makes a fundamental flawed assumption that the distribution of the packet loss is uniform throughout the duration of a connection. The true nature of packet loss tends to be non-uniform. The burstiness statistic takes this non-uniformity in packet loss distribution into account by

determining the non-uniform duration of the lost packets with respect to the successfully received packets. Thus, the accuracy of the burstiness statistic in determining the quality of the connection is much greater than when the average packet loss rate is used.

Hardy and Whitfield also do not suggest determining the burstiness statistic by determining a plurality of duration numbers that identify different non-uniform durations of contiguously occurring lost packets or contiguously occurring received packets in the sequence of packets as specified in claim 8. Hardy and Whitfield also do not suggest determining a variance in the plurality of duration numbers as specified in claim 9.

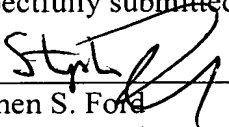
Hardy discloses the correlation of known objective measurements, such as the average packet loss rate, to the perceived quality of a connection. The perceived quality of the connection is determined by using test subjects who subjectively evaluate and rate the connection quality. This subjectively perceived quality is then correlated with the objectively measured data to determine the actual acceptable objective quality standards for a connection. Hardy, column 5, lines 54-64; column 6, lines 31-46; column 7, lines 15-27, 36-45. By substituting the burstiness statistic disclosed in the present invention for the average packet loss rate, the correlation between the subjectively perceived quality of the connection and the objective measurements would improve because the burstiness statistic more accurately reflects the true nature of packet loss within a connection.

For the reasons stated above, claims 1-68 are patentable under 35 U.S.C. § 103(a) over Whitfield in view of Hardy.

CONCLUSION

For the foregoing reasons, reconsideration and allowance of claims 1-68 of the application as amended is solicited. The Examiner is encouraged to telephone the undersigned at (503) 222-3613 if it appears that an interview would be helpful in advancing the case.

Respectfully submitted,

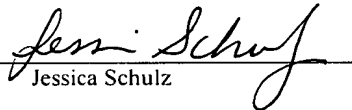


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